# Commonwealth of Massachusetts Center for Health Information & Analysis (CHIA) Non-Government Agency Application for Data

<u>NOTE</u>: This application is to be used by all applicants, except Government Agencies, as defined in 957 CMR 5.02.

#### I. GENERAL INFORMATION

APPLICANT INFORMATION	
Applicant Name:	Jianjing Lin
Title:	Doctoral student
Organization:	University of Arizona
Project Title:	The Impact of Price Transparency on Health Care Expenditure
Date of Application:	July 29, 2013
Project Objectives (240 character limit)	The purpose of this project is to study the effect of price transparency on health care expenditure. The first objective will focus on whether consumers response differently with the presence of price information on medical goods and services. The second objective aims to assess the impact of price transparency on the final price of medical goods and services.
Project Research Questions	<ol> <li>Did price transparency facilitate consumer price search and hence contain health care cost?</li> <li>Did price transparency increase or reduce the final price of health care products and services?</li> </ol>

Please indicate if you are a Researcher, Payer, Provider or Provider Organization and you are seeking data pursuant to 957 CMR 5.04 (De-Identified Data) or 957 CMR 5.05 (Direct Patient Identifiers for Treatment or Coordination of Care).

•	Researcher	0	957 CMR 5.04 (De-identified Data)
0	Payer	0	957 CMR 5.05 (Direct Patient Identifiers)
О	Provider / Provider Organization		

All other requests are subject to 957 CMR 5.06.

# **II. PROJECT SUMMARY**

Briefly describe the purpose of your project and how you will use the CHIA data?

The purpose of this project aims to study the effect of price transparency on health care expenditure. In particular, there are two objectives for the analysis: (1) Testify consumers' response to price information; (2) Estimate the change in the final price of health care goods and services if price information is publicly available to all parties. The CHIA data contains sufficient information to test for the hypothesis (for the first objective) and do the estimation (for the second objective). For more details on how to use the data please refer to the attached document of the research design.

# **III. FILES REQUESTED**

Please indicate the databases from which you seek data, the Level(s) and Year(s) of data sought.

DATABASE	Level 1 <sup>1</sup> or 2 <sup>2</sup>	Single or Multiple Use	Curre	Of Data Requested nt Yrs. Available 2009 - 2011
Medical Claims	Medical Claims  ✓ Level 1 ✓ Level 2		2009 2010 2011	
Pharmacy Claims  Level 1  Level 2		Single	2009	<b>№</b> 2010 2011
Dental Claims  Member Eligibility  Provider  Product	Level 2 Level 2 Level 2 Level 2 Level 2 Level 2	Single Single Single	2009 2009 2009 2009	2010 2011 2010 2011
CASEMIX		Level 1 - 6		Fiscal Years Requested
Inpatient Discharge	Level 1 – No Identifiable Data Elements  Level 2 – Unique Physician Number (UPN)  Level 3 – Unique Health Information Number (UHIN)  Level 4 – UHIN and UPN  Level 5 – Date(s) of Admission; Discharge; Significant Procedures  Level 6 – Date of Birth; Medical Record Number; Billing Number			<u>1998-2012 Available</u> (limited data available 1989- 1997)
Outpatient Observation	Level 2 – Ur Level 3 – Ur Level 4 – Ur Level 5 – Da Procedures	o Identifiable Data Elemenique Physician Number in nique Health Information HIN and UPN ate(s) of Admission; Discharte of Birth; Medical Reco	(UPN) Number (UHIN) narge; Significant	<u>2002-2011 Available</u>

<sup>1</sup> Level 1 Data: De-identified data containing information that does not identify an individual patient and with respect to which there is no reasonable basis to believe the data can be used to identify an individual patient. This data is de-identified using standards and methods required by HIPAA.

<sup>&</sup>lt;sup>2</sup> Level 2 (and above) Data: Includes those data elements that pose a risk of re-identification of an individual patient.

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	Level 1 – No Identifiable Data Elements	2000-2011 Available		
	Level 2 – Unique Physician Number (UPN)			
	Level 3 – Unique Health Information Number (UHIN)			
Emergency Department	Level 4 – UHIN and UPN; Stated Reason for Visit			
	Level 5 – Date(s) of Admission; Discharge; Significant Procedures			
	Level 6 – Date of Birth; Medical Record Number; Billing Number			
IV. REQUESTED DATA ELEMENTS [APCD]  State and federal privacy laws limit the use of individually identifiable data to the minimum amount of data needed to accomplish a specific project objective. Please use the APCD Data Specification Workbook to identify which data elements you would like to request and attach this document to your application.  V. REQUESTED DATA ELEMENTS [CASE MIX]  Please use the CASE MIX DATA SPECIFICATION WORKBOOK to identify which deniable data elements (from Level 2 or above) you would like to request and attach this to your application.  VI. MEDICAID DATA  Federal law (42 USC 1396a(a)7) restricts the use of individually identifiable data of Medicaid recipients to uses that benefit the administration of the Medicaid program. If you are requesting Medicaid data from Level 2 or above, please describe in detail why your use of the data benefits the administration of the Medicaid program.				
VII. MEDICARE DATA  Medicare data may be disseminated to state agencies and/or entities conducting research projects that are directed and partially funded by the state if such research projects would allow for a Privacy Board or an IRB to make the findings listed at 45 CFR 164.512(i)(2)(ii) if the anticipated data recipient were to apply for the data from CMS directly. If you are requesting Medicare data, please explain how your research project is directed and partially funded by the state and describe in detail why your proposed project meets the criteria set forth in 45 CFR 164.512(i)(2)(ii). Applicants must describe how they will use the data and inform CHIA where the data will be housed. CHIA must be informed if the data has been physically moved, transmitted, or disclosed.				

# VIII. DIRECT PATIENT IDENTIFIERS<sup>3</sup>

State and federal privacy laws may require the consent of Data Subjects prior to the release of any Direct Patient Identifiers. If you are requesting data that includes Direct Patient Identifiers, please provide documentation of patient consent or your basis for asserting that patient consent is not required.

<sup>&</sup>lt;sup>3</sup> <u>Direct Patient Identifiers</u>. Personal information, such as name, social security number, and date of birth, that uniquely identifies an individual or that can be combined with other readily available information to uniquely identify an individual.

#### IX. REQUESTS PURSUANT TO 957 CMR 5.04

Payers, providers, provider organizations and researchers seeking access to Level 1 (de-identified) data are required to describe how they will use such data for the purposes of lowering total medical expenses, coordinating care, benchmarking, quality analysis or other administrative research purposes. Please provide this information below.

#### X. FILTERS

If you are requesting APCD elements from Level 2 or above, describe any filters you are requesting to use in order to limit your request to the minimum set of records necessary to complete your project. (For example, you may only need individuals whose age is less than 21, claims for hospital services only, or only claims from small group projects.

APCD FILE	DATA ELEMENT(S) FOR WHICH FILTERS ARE REQUESTED	RANGE OF VALUES REQUESTED
Medical Claims		
Pharmacy Claims		
Dental Claims		
Membership Eligibility		
Provider		
Product		

#### XI. PURPOSE AND INTENDED USE

1. Please explain why completing your project is in the public interest.

The way to shop medical goods and services is different in the sense that price actually paid is remarkably opaque. Even worse, there is wide variation in medical prices. Price transparency is described as an effective mechanism to reduce health care cost. However, there is also concern that observable price information may contribute to a rise in the price in the long term. Most previous studies are qualitative in nature or with some descriptive statistics. The proposed study aims to answer the question based on a rigorous analysis.

The results are of considerable importance in terms of policy making. If price transparency does play a role in reducing health care expenditure, governments should help collect and publish price information. If the impact is not evident, it may deserve a closer look at the reasons behind. A possible one may be the lack of timely and salient information on quality. In that case, regulatory authorities may consider developing effective tools for consumers to identify the level of quality of different providers.

- 2. **Attach** a brief (1-2 pages) description of your research methodology. (This description will not be posted on the internet.)
- 3. Has your project received approval from your organization's Institutional Review Board (IRB)?

	Yes, and a copy of the approval letter is attached to this a	application.
~	No, the IRB will review the project on	( Please note that the IRB is
pending.	Once the DUA is ready, they will finalize the review.).	
	No, this project is not subject to IRB review.	
	No, my organization does not have an IRB.	

#### XII. APPLICANT QUALIFICATIONS

1. Describe your qualifications to perform the research described or accomplish the intended use of CHIA data.

Jianjing Lin holds an MA in Economics from the University of Arizona and a BA in Economics from Sun Yat-sen University in China. She is currently a doctoral student in Economics from the University of Arizona. She is also the research assistant of Gautam Gowrisankaran, who is a leading scholar in Health Economics, specializing in health care policy analysis and hospital competitions. Gowrisankaran is Ms. Lin's Committee Chair and will also supervise the project.

2. Attach résumés or curriculum vitae of the applicant/principal investigator, key contributors, and of all individuals who will have access to the data. (These attachments will not be posted on the internet.)

### XIII. DATA LINKAGE AND FURTHER DATA ABSTRACTION

1.	Does your project require linking the CHIA Data to another dataset? YES NO
2.	If yes, will the CHIA Data be linked to other patient level data or with aggregate data (e.g. Census data)?  Patient Level Data  Aggregate Data
3.	If yes, please identify all linkages proposed and explain the reasons(s) that the linkage is necessary to accomplish the purpose of the project.
4.	If yes, please identify the specific steps you will take to prevent the identification of individual patients in the linked dataset.

# XIV. PUBLICATION / DISSEMINATION / RE-RELEASE

1. Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from such data, in any paper, report, website, statistical tabulation, or similar document.

The raw data will never be displayed on the internet. The analysis will be contained in an academic paper. Tables of summary statistics of the most relevant variables (except the confidential ones) will be provided. The results from estimation will also be reported. The paper will be submitted to an academic journal or presented in a conference in the fields of Economics or Health Economics. The results and analysis will be publicly available through my professional website or upon email request.

u	he results of the analysis will be publicly available for free throu pon email request.	ıgh my p	rofessiona	l website or	
3.	Will you use the data for consulting purposes?	YES		NO	V
4.	Will you be selling standard report products using the data?	YES		NO	~
5.	Will you be selling a software product using the data?	YES		NO	V
6.	If you have answered "yes" to questions 3, 4 or 5, please desc	ribe the	types of pr	oducts, service	es or st
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2. Will the results of your analysis be publicly available to any interested party? Please describe how an interested

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